

I Claim:

1. An enclosure cooling unit which comprises

a first heat exchanger,

10 a second heat exchanger,

a third heat exchanger, and

one or more Peltier devices;

wherein

15 said first heat exchanger transfers heat from said enclosure cooling unit to the

ambient air outside said enclosure,

said second heat exchanger transfers heat from the air within said enclosure to

said enclosure cooling unit,

said third heat exchanger transfers heat from cooling fluid circulating within

said enclosure to said ambient air,

20 said one or more Peltier devices transfer heat from said second heat exchanger to

said first heat exchanger, and

said one or more Peltier devices transfer heat from said second heat exchanger to

said third heat exchanger.

2. The invention of Claim 1 additionally comprising one or more additional heat

25 exchangers

wherein said enclosure additionally contains one or more heat producing

components, and

wherein each of said additional heat exchangers transfers heat from one or more

5 of said heat producing components to said cooling fluid.

3 23.

Sub
Unit

The invention of Claim 21 additionally comprising a controller unit and sensors

wherein said sensors detect various temperature and flow rates within said enclosure cooling unit,

10

said sensors provide information regarding said detected temperature and flow rates to said controller,

said controller provides voltages and currents to electrical and/or electronic components within said enclosure cooling unit, and

said controller utilizes said detected temperature and flow rates to determine said voltages and currents.

15 4 24..

An enclosure cooling unit comprising

a first heat exchanger,

a second heat exchanger,

a third heat exchanger, and

one or more Peltier devices;

20

wherein

said first heat exchanger transfers heat from said enclosure cooling unit to the ambient air outside said enclosure,

said second heat exchanger transfers heat from the air within said enclosure to said enclosure cooling unit,

25

said third heat exchanger transfers heat from cooling fluid circulating within said enclosure to said enclosure cooling unit, and

said one or more Peltier devices transfer heat from said second heat exchanger to

5 said first heat exchanger.

5 25. The invention of Claim 24 additionally comprising one or more additional heat exchangers

Sub
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wherein said enclosure additionally contains one or more heat producing components, and

10 wherein each of said additional heat exchangers transfers heat from one or more of said heat producing components to said cooling fluid.

6 26. The invention of Claim 23 additionally comprising a controller unit and sensors wherein said sensors detect various temperature and flow rates within said enclosure cooling unit,

15 said sensors provide information regarding said detected temperature and flow rates to said controller,

said controller provides voltages and currents to electrical and/or electronic components within said enclosure cooling unit, and

20 said controller utilizes said detected temperature and flow rates to determine said voltages and currents.

7 27. An enclosure cooling unit comprising a first heat exchanger,

a second heat exchanger,

a third heat exchanger, and

25 one or more Peltier devices;

wherein

said first heat exchanger transfers heat from said enclosure cooling unit to the

5 ambient air outside said enclosure,
said second heat exchanger transfers heat from cooling fluid circulating within
said enclosure to said enclosure cooling unit,
said third heat exchanger transfers heat from the air within said enclosure to
said cooling fluid, and
10 said one or more Peltier devices transfer heat from said second heat exchanger to
said first heat exchanger.

8 28. The invention of Claim 27 additionally comprising one or more additional heat
exchangers
wherein said enclosure additionally contains one or more heat producing
15 components, and
wherein each of said additional heat exchangers transfers heat from one or more
of said heat producing components to said cooling fluid.

9 29. The invention of Claim 27 additionally comprising a controller unit and sensors
wherein said sensors detect various temperature and flow rates within said
20 enclosure cooling unit,
said sensors provide information regarding said detected temperature and flow
rates to said controller,
said controller provides voltages and currents to electrical and/or electronic
components within said enclosure cooling unit, and
25 said controller utilizes said detected temperature and flow rates to determine said
voltages and currents.

10 30. The invention of Claim 27 wherein

5 *Sub P3* said one or more Peltier devices transfer heat from said third heat exchanger to said second heat exchanger.

11 ~~31~~. The invention of Claim 27 wherein said one or more Peltier devices transfer heat from said third heat exchanger to said first heat exchanger.